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## <u>REMARKS</u>

This amendment responds to the Office Action dated March 27, 2003, in which the Examiner rejected all of the pending claims other than claim 2. In response, applicant has canceled claims 1 and 13 (without prejudice or disclaimer, subject to refiling in a continuation or divisional application), amended claims 3-7, 9, 11, 12, 14-17, and 20-22, and presented new claims 23 and 24. Reexamination and reconsideration are respectfully requested in view of the foregoing amendments and the following remarks.

## The 35 U.S.C. § 112 Rejections

Claims 1, 3-17 and 20-22 are rejected as allegedly containing subject matter which was not sufficiently described in the specification in such a way as to reasonably convey to one skilled in the art that the inventor had possession of the claimed invention.

Applicant respectfully disagrees with the rejection of the Examiner. However, in an effort to advance prosecution of this application, applicant has canceled claim 1. The claims that were dependent on claim 1 have been amended to depend from claim 2 (except for claims 4 and 6 which have been rendered dependent on claim 3). Moreover, claims 20-22 have been amended so as to more specifically identify the claimed sequences of the invention. Basis for the amendments can be found on page 7, lines 14-21; page 13, lines 11-14; and page 13, lines 19-23 of the specification. Applicant reserves the right present claims directed to subject matter

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of the cancelled claims into a continuation or divisional application.

Applicant submits that the subject matter of the claims as amended is sufficiently described in the specification. Applicant has claimed polynucleic acids displaying at least 90% sequence homology to a polynucleic acid of the invention. As the Examiner must realize, small nucleotide alterations can be made to a polynucleic acid without significantly affecting the properties of such polynucleic acid (for instance through conservative amino acid substitution). If polynucleic acids with such small alterations were not protected by the claims, applicant would not obtain fair protection for her contribution to the art. A third party would easily be able to avoid infringement by way of a small nucleotide alteration, thereby depriving applicant of her contribution. It is submitted therefore that the claimed invention is sufficiently described in the specification to pass muster under 35 U.S.C. §112, first paragraph. Applicant therefore respectfully requests that the pending rejection for alleged lack of written description be reconsidered and withdrawn.

The Examiner next asserts that claims 1, 4-6, 9, 11-12, and 15-17 are indefinite, under 35 U.S.C. §112, second paragraph. In response, applicant has amended each of the foregoing claims to delete or clarify the allegedly indefinite aspect of the claim. Applicant submits that the indefiniteness rejection under 35 U.S.C. §112, second paragraph has been rendered moot and may be withdrawn.

## The Anticipation Rejections

Claims 11-13 are rejected under 35 U.S.C. §102(a) as allegedly being anticipated by Levi. Applicant has amended claims 11 and 12 to distinguish Levi.

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The sequence disclosed by L\_vi is incapable of specifically binding to SEQ ID NO 1, SEQ ID NO 17, or SEQ NO 19 under stringent conditions. Amended claims 11 and 12 are therefore novel in view of Levi. In addition, applicant has cancelled claim 13, rendering the rejection of that claim moot. Applicant submits that the Examiner may now withdraw the rejection under 35 U.S.C. §102(a), based upon Levi.

Claims 11-13 and 21 have been rejected under 35 U.S.C. §102(b), as allegedly being anticipated by Noble. Amended claims 11 and 12 are not anticipated by Nobel since the sequence disclosed by Noble is incapable of specifically binding to SEQ ID NO 1, SEQ ID NO 17, or SEQ ID 19 under stringent conditions. Moreover, amended claim 21 is not anticipated by Noble since Noble does not disclose a polynucleic acid displaying at least 90% sequence homology to SEQ ID NO 17 or a fragment thereof of about 5 to 50 nucleotides long. Amended claims 11, 12, and 21 are therefore novel over Noble. In addition, claim 13 has been cancelled, so the rejection thereof has become moot.

Claims 13 and 22 are rejected under 35 U.S.C. 102(b) as allegedly being anticipated by Levi. First, applicant notes that claim 13 has been cancelled, so the rejection must be withdrawn. Second, applicant respectfully disagrees with the Examiner's assertion that the first priority document of the current application, EP 97202808, allegedly does not provide sufficient basis for claims pending herein.

Furthermore, amended claim 22 is not anticipated by Levi, since Levi does not disclose a polynucleic acid displaying at least 90% sequence homology to SEQ ID NO 19 or a fragment thereof of about 5 to 50 nucleotides long. Amended claim 22 is therefore novel over L vi. Applicant submits therefore that the outstanding

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rejection of claims 13 and 22 under 35 U.S.C. §102(b), as anticipated by Levi, be reconsidered and withdrawn.

The Examiner has also rejected claim 13 under 35 U.S.C. §102(b), as allegedly being anticipated by Brennan. The cancellation of claim 13 has rendered this rejection moot.

## The Obviousness Rejection

Claims 15 and 17 are rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Levi or in the alternative Noble each in view of Ahem. The Examiner asserts that Noble teaches a sequence that possesses 83% identity to SEQ ID NO 17, and that Levi teaches a sequence that has 80% identity to SEQ ID NO 19, and that the sequences appear to possess enough identity to disclosed SEQ ID NOS 17 and 19 to be able to hybridize to the complement of SEQ ID NOS 17 and 19. The Examiner admits that neither Levi nor Noble discuss use of the sequence in kit format, but suggest that Ahern teaches using them in this form. The three references, according to the Examiner constitute a *prima facie* case of obviousness.

Applicant respectfully requests reconsideration of this rejection. Claim 15 has been amended so as to claim a polynucleic acid capable of binding particular sequences. Claims 16 and 17 have been amended to refer to specific primers and probes, also referring to particular sequences. These polynucleic acids, primers and probes are not disclosed or suggested by Levi or Noble. There is no basis, therefore, to continue to assert an obviousness rejection based upon the segmenters. Applicant respectfully requests that the rejection of claims 15-17 be

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withdrawn.

In sum, applicant has cancelled claims 1 and 13 and amended the rejected claims in a manner that applicant renders those claims patentable over the cited references. Applicant thanks the Examiner for the notification that claim 2 is allowed. Reconsideration and allowance of the other pending claims is respectfully requested in view of the amendments, and for the reasons stated above.

The Commissioner is hereby authorized to credit any overpayment or charge any additional fee required in connection with the filing of this application to Deposit Account No. 03-3125.

Dated: September 12, 2003

I hereby certify that this paper is being deposited this date with the U.S. Postal Service as first class mail addressed to:

Commissioner for Patents, P.O. Box 1450

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